

ABSTRACT

A tunable filter having a fixed substrate, a first and second plate comprising a high-
temperature superconductor material on the fixed substrate, a movable substrate, a mechanical
driver attached to the fixed substrate and the movable substrate, a floating plate comprising a high-
5 temperature superconductor material on the fixed substrate wherein the floating plate, the first
plate, and the second plate define a gap, and wherein the gap is varied by length changes in the
mechanical driver is provided.